

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILII	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/781,113 02/18/2004		18/2004	Clemens Johannes Maria De Vroome	A-3904	1963
24131	7590	09/21/2006		EXAM	INER
		RG STEMER L	CULLER, JILL E		
P O BOX 2480 HOLLYWOOD, FL 33022-2480				ART UNIT PAPER NUMBE	
	*			2854	

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-	Application No.	Applicant(s)				
Office Action Summary	10/781,113	VROOME, CLEMENS JOHANNES MARIA DE				
omee neadin cummary	Examiner	Art Unit				
	Jill E. Culler	2854				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period value of the reply within the set or extended period for reply will, by statute to reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 26 Ju	ine 2006.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-22 is/are pending in the application.	•					
4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-22</u> is/are rejected.		•				
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on 18 February 2004 is/are		d to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).				
1. Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents		on No				
3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage				
application from the International Bureau	ı (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Paper No(s)/Mail Date 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Art Unit: 2854

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-2, 5, 7-8, 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,058,844 to Niemiec in view of U.S. Patent No. 4,508,033 to Fischer, U.S. Patent No. 3,238,869 to West et al., and U.S. Patent No. 3,875,682 to Justus et al.

With respect to claims 1, 5, 7 and 10-15, Niemiec teaches a printing material web processing machine, in the form of a web-fed rotary offset press, comprising: at least one press cylinder, 16, in the form of a driven, rotating element, for printing a web, 14; a dryer, 18, disposed downstream of said press cylinder, said dryer guiding the web along a path; and a first pull roll, 20, which is a driven, rotating cooling roll, disposed downstream of said dryer for conveying the web along the path with a given tensile stress.

Niemiec does not teach an apparatus downstream of the press cylinder and upstream of the dryer for separating the web from said press cylinder during a normal printing operation, or a second pull roll, in the form of a driven, rotating element, disposed downstream of said press cylinder and upstream of said dryer; or a second apparatus for driving said pull roll, said second apparatus driving said first pull roll at a

Art Unit: 2854

rotational speed being reduced as compared with a rotational speed of said press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder, such that the tensile stress is considerably lower than a tensile stressing a printing path upstream of said at least one printing cylinder.

Fischer teaches a printing press having a pull roll, 14, 15, which is a driven, rotating element, disposed downstream of a press cylinder, 5, and upstream of a dryer, 8.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the pull roll of Fischer with the printing machine of Niemiec in order to more smoothly transition the web from the printing press cylinders into the dryer.

West et al. teaches an apparatus, 160, 161, disposed downstream of a press cylinder. 30, for separating a web from the press cylinder. See column 10, lines 3-16.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Niemiec to have a separating apparatus, as taught by West et al. in order to improve the transition of the web from the last press cylinder into the dryer and minimize potential damage to the web.

Justus et al. teaches an apparatus for driving a pull roll for a web at a rotational speed being reduced as compared to a rotational speed of a press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder, thereby providing a tensile stress considerably lower than that in a printing path upstream of said at least one press cylinder. See column 2, line 65 – column 3, line 4.

Art Unit: 2854

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the pull roll driving apparatus of Justus et al. with the pull roll of Niemiec in order to enhance the tendency of the edge roll to eliminate flutter.

With respect to claims 2 and 8, Niemiec does not teach a third apparatus for controlling the rotational speed of the first pull roll and of the press cylinder, said third apparatus controls the rotational speed of said pull roll to a value below a value of the rotational speed of said press cylinder.

Justus et al. teaches an apparatus for driving a pull roll for a web at a rotational speed being reduced as compared to a rotational speed of a press cylinder. See column 2, line 65 – column 3, line 4.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the pull roll driving apparatus of Justus et al. with the pull roll of Niemiec in order to enhance the tendency of the edge roll to eliminate flutter.

With respect to claims 16-18 and 22, Niemiec does not teach that the drying path is composed of path parts which follow one another and are oppositely curved, is substantially meander-like, or is substantially sinusoidal.

Justus et al. teaches a drying path composed of path parts which follow one another and are oppositely curved, is substantially meander-like, or is substantially sinusoidal. See Figure 1.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the drying path of Justus et al. with the dryer of Niemiec in order to reduce flutter and improve drying efficiency.

Art Unit: 2854

With respect to claims 19 and 20, although Niemiec does not explicitly teach controlling the second tensile stress to a value less than 50 N/m, or controlling the second tensile stress such that the drying path has a radii of curvature following one another of in each case less than 200 mm, these values would appear to be specific to a given application and could be readily determined by routine experimentation.

With respect to claim 21, Niemiec teaches the use of a dryer, 8, through which a temperature of the web along the drying path would increase.

3. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec in view of Fischer, West et al. and Justus et al., as applied to claims 1-2, 5, 7-8 and 10-22 above and further in view of U.S. Patent No. 6,550,390 to Frankenberger.

Niemiec, Fischer, West et al. and Justus et al. teach all that is claimed, as in the above rejection of claims 1-2, 5, 7-8 and 10-22 except that the first apparatus for separating the web from said press cylinder separates the web from said press cylinder without contact, having at least one element selected from the group consisting of blowing elements and ultrasound elements.

Frankenberger teaches an apparatus for separating a web from a cylinder using ultrasonic waves to separate the web without contact. See column 4, lines 45-60.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Niemiec to use the ultrasonic separation device of Frankenberger in order to be able to separate the web from the cylinder with less potential for damage to the web.

Art Unit: 2854

4. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec in view of Fischer, West et al. and Justus et. al., as applied to claims 1-2, 5, 7-8, and 10-22 above, and further in view of U.S. Patent No. 5,913,471 to Makosch et al.

Niemiec, Fischer, West et al. and Justus et al. teach all that is claimed, as in the above rejection of claims 1-2, 5, 7-8, 10-22, except that the second pull roll is configured or coated in an ink-repellent manner, at least in some sections.

Makosch et al. teaches a separating roll, 3a, 4a, for a printing press that is configured or coated in an ink-repellent manner. See column 3, lines 25-27.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Niemiec to use the ink repellant separating roll, as taught by Makosch et al. in order to prevent an ink layer from building up.

Response to Arguments

5. Applicant's arguments filed June 26, 2006 have been fully considered but they are not entirely persuasive.

Applicant's arguments with respect to the amendment of claims 1, 7 and 14 to recite separating the web from the press cylinder "during a normal printing operation" have been considered and the rejection has been amended, rendering these arguments moot.

Applicant's arguments with respect to the amendment to add that the given tensile stress "is considerably lower than a tensile stress in a printing path upstream of

Art Unit: 2854

said at least one printing cylinder" have been considered but are not persuasive. The recitation that the tensile stress is considerably lower can be understood in light of the specification, but the definition is not bound by language in the specification that is not included in the claims. Therefore, it remains reasonable to interpret the teachings of Justus to include providing a tensile stress considerably lower than that in a path upstream of the printing cylinder.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-F 10:00-6:00.

Application/Control Number: 10/781,113 Page 8

Art Unit: 2854

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jec

Daniel J. Colilla
Primary Examiner
Art Unit 2854